PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE UPGRADING OF THE CROSSWALKS AND THE INSTALLATION APS/CPS FOR ALL PEDESTRIAN CROSSINGS. AND A NEW CROSSWALK IS TO BE ADDED ACROSS THE SOUTH LEG OF MD 187 (OLD GEORGETOWN ROAD) AT AUBURN AVENUE. MD 187 (OLD GEORGETOWN RD) IS CONSIDERED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA TWO PHASE. SEMI-TRAFFIC ACTUATED MODE. WITH THE MD 187 APPROACHES RUNNING CONCURRENTLY. AUBURN AVE. RUNS ALONE. THERE IS A CONCURRENT PEDESTRIAN PHASE ACROSS THE EAST LEG OF AUBURN AVE. AND ALTERNATE PEDESTRIAN PHASES ACROSS THE NORTH AND SOUTH LEG OF MD 187 (OLD GEORGETOWN RD).

SPECIAL NOTE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND SHALL PROPERLY LABEL EACH CABLE.

THE CONTRACTOR SHALL NOTIFY MR. KAMAL HAMUD AT (240) 777-8761 72 HOURS IN ADVANCE OF ALL WORK.

THE APS PUSHBUTTONS SHALL BE DELIVERED TO MR. KEITH LORD (301) 279-1291 AT THE MONTGOMERY COUNTY TECHNICAL CENTER BEFORE WORK BEGINS.

APS WILL FUNCTION AS FOLLOWS FOR CROSSING OLD GEORGETOWN RD:

A.WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME. THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE "WAIT TO CROSS OLD GEORGETOWN AT AUBURN".

B. WHEN THE WALK PHASE BEGINS. THE PUSHBUTTON UNIT WILL PROVIDE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

APS WILL FUNCTION AS FOLLOWS FOR CROSSING AUBURN AVE:

C.WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME. THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE "WAIT TO CROSS AUBURN AT GEORGETOWN".

D.WHEN THE WALK PHASE BEGINS. THE PUSHBUTTON UNIT WILL PROVIDE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

EQUIPMENT LIST FOR AREA WIDE CONTRACT # XX4495185

A. EQUIPMENT TO BE SUPPLIED BY THE ADMIINSTRATION.

ITEM QUANTITY UNIT DESCRIPTION
NO.
9086 1 1 [UPDATED] VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR ITEM QUANTITY UNIT DESCRIPTION

1	EA	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
425	LF	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS. ANY WIDTH
8	CY	CLASS 2 EXCAVATION
1	CY	TEST PIT EXCAVATION
320	LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
90	LF	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
140	LF	STANDARD TYPE A COMBINATION CURB AND GUTTER
600	SF	5 INCH CONCRETE SIDEWALK
18	EA	12 INCH (R. Y. G) LED SIGNAL HEAD
1	EA	2 WIRE CENTRAL CONTROL UNIT
3	ΈA	ADJUST HANDHOLE TO GRADE
6	EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
4	EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
6	EA	LED 16 INCH COUNTDOWN PEDESTRIAN HEAD
1	EA	REMOVE & DISPOSE OF EQUIPMENT PER ASSIGNMENT
1	EA	REMOVE FOUNDATION 12 INCH DEPTH
, 75		UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
80	SF	DETECTABLE WARNING SURFACES
85	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
20	LF	1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
15	SF	INSTALL OVERHEAD SIGN
1		VIDEO DETECTION CAMERA AND CABLE UP TO 500 FT
		ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
750	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
375	LF	LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
135	LF	SAW CUT FOR SIGNAL (LOOP DETECTOR)
	8 1 320 90 140 600 18 1 3 6 4 6 1 1 75 80 85 20 15 1 675 750	425 LF 8 CY 1 CY 320 LF 90 LF 140 LF 600 SF 18 EA 1 EA 4 EA 6 EA 1

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

Mr. Jeffery Wentz Assistant District Engineer - Traffic Phone: (301) 513-7358

Mr. Wayne Mowdy
Assistant District Engineer - Maintenance
Phone: (301) 513-7304

Mr. Augie Rebish
Utility Engineer
Phone: (301) 513-7350

Mr. Richard L. Daff. Sr. Chief. Traffic Operations Division Phone: (410) 787–7630

Mr. Ed Rodenhizer Supervisor, Signal Operations Phone: (410)-787-7650

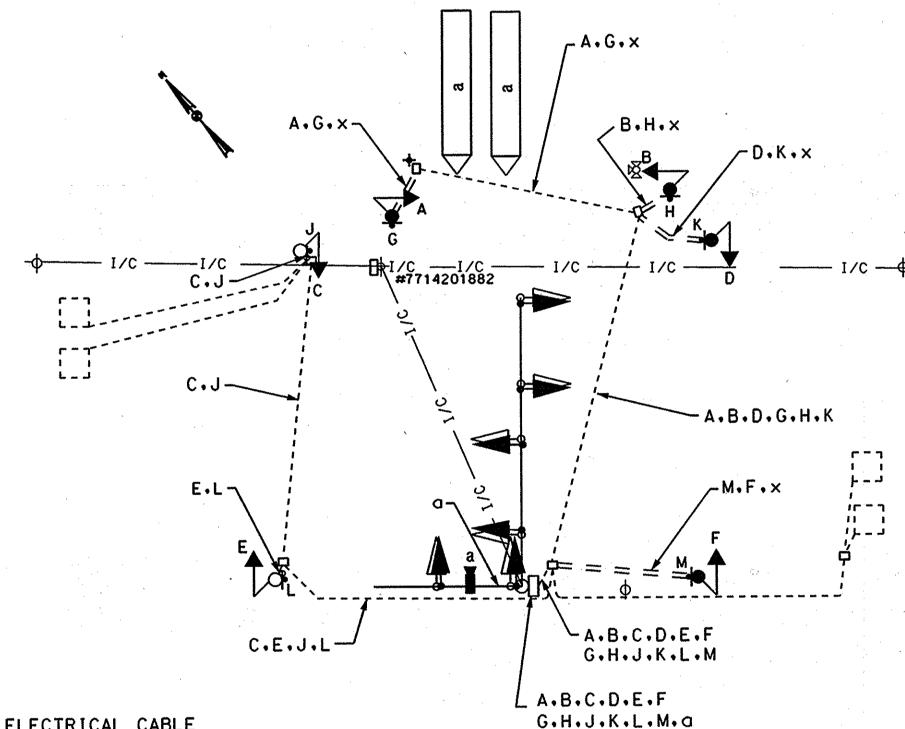
MR. KAMAL HAMUD Montgomery County Phone: 240-777-8761

PHASE CHART

1	2	3	4	5	6	7	8	9	10	11	12
R Y G	R Y G	R Y G	R Y G	RYG	RYG						田数

PHASE 2 AND 6	G	G	G	G	R	R	WK	WK	DW	DW	DW	DW	
PED CLEARANCE	G	G	G	G	R	R	FL/DW	FL/DW	DW	DW	DW	DW	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
2 AND 6 CHANGE	Y	Υ	Y	Υ	R	R	DW	DW	DW	DW	DW	DW	
PHASE 4	R	R	R	R	G	G	DW	DW	DW	DW	DW	DW	
4 CHANGE	R	R	R	R	Υ	Υ	· DW	DW	DW	DW	DW	DW	
PHASE 4 ALT	R	R	R	R	G	G	DW	DW	WK	WK	WK	WK	O
PED CLEARANCE	R	R	R	R	G	G	DW	DW	FL/DW	FL/DW	FL⁄DW	FL⁄DW	
4 ALT CHANGE	R	R	R	R	Υ	Υ	DW	DW	DW	DW	DW	DW	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	† Δ † †

WIRING DIAGRAM



A.B.C. 5 CONDUCTOR ELECTRICAL CABLE D.E.F (NO. 14 AWG)

WIRING KEY

G.H.J. 2 CONDUCTOR ELECTRICAL CABLE K.L.M > (NO. 14 AWG)

a > VIDEO DETECTION CABLE

x 1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE

+ GROUND ROD

NOTE:
THE CONTRACTOR IS TO REMOVE ALL UNUSED CABLE TO ENSURE COMPLIANCE WITH THE CONDUIT FILL REQUIREMENTS OF THE NEC.

TOD # XX449-08 SHA# MO527A53/B53



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY

MD 187 (OLD GEORGETOWN RD)

MD 187 (OLD GEORGETOWN RD)

AND AUBURN AVE.

GENERAL INFORMATION SHEET

DF

TES, INC.

CH

F./

1045

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TS

BRUDIS & ASSOCIATES, INC.
Consulting Engineers

9220 Rumsey Road; Suite 110
Columbia, Maryland 21045
Phone 410-884-3607
www.brudis.com

 SCALE
 N.T.S.
 ADVERTISED
 DATE
 4-15-08
 CONTRACT NO.
 XX4495185

 DESIGNED BY
 J. BOLING
 COUNTY
 MONTGOMERY

 DRAWN BY
 N. GUPTA
 LOGMILE
 15018700.46

 CHECKED BY
 J. BOLING
 TIMS NO.
 1348

 F.A.P. NO.
 TOD NO.
 TOD NO.

 TS NO. TS-3784B
 DRAWING
 - 1 OF 1
 SHEET NO.
 3 OF 3

PLOTTED: Thursday, June 26, 2008 AT 01:55 PM FILE: J:\DATA\IS48\pGN-T000_MD187.dgn